

## بررسی کلینیکی تأثیر بالینی اشعه درمانی بر سلامت لثه و مخاط دهان در بیماران مراجعه کننده به مرکز رادیوتراپی بیمارستان قائم (عج) مشهد

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**Title:** Clinical evaluation of the effects of radiotherapy on oral mucosa and gingival health in radiotherapy center of Ghaem Hospital

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**Introduction:**

It is necessary to mention that 4% of malignancies include pharyngeal and oral cancers. One of the treatments is radiotherapy in addition with chemotherapy and surgery. Radiotherapy of head and neck can cause some complications with impression on mucos. Regarding this point, we decided to study different effects of radiotherapy on gingival and oral mucosa.

**Materials & Methods:**

This descriptive analytical study was performed on 30 patients with head and neck cancers referred to radiotherapy department of Ghaem Hospital. Data collection method included interview, clinical examination and patient's medical file investigation. The data was collected through relevant forms. The relationship between deferent dosages of radiation on gingival health and oral mucosa was investigated. Data analysis was done with use of GLM, Cochran, MANOVA tests Via SPSS V. 11.5 software.

**Results:**

A significant relationship between irritation of oral mucosa ulcer development, mucositis and increase in radiation dosage was observed. But there wasn't any significant relationship between candidosis, ANUG, perleche and radiation dosage. Periodontal Index (PI), Gingival Index (GI) and Papilla Bleeding Index (PBI) showed on increase, but due to limited time of study, no changes on gingival recession was observed. Plaque Index (PII) decreased during treatment process due to increase in oral hygiene.

**Conclusion:**

There was a direct relationship between oral radiotherapy complications and increase in radiation dosage. With attention to this point that some complications such as ANUG and perleche were not observed, doing a study with longer duration is recommended.

**Key words:**

Radiotherapy, ANUG, mucositis, periodontal index, gingival index, oral health index.

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### چکیده

#### مقدمه:

کانسره‌های دهانی و فارتزیاال حدود ۴٪ بدخیمی‌ها را شامل می‌شود. یکی از روش‌های درمانی این بیماران علاوه بر جراحی و شیمی‌درمانی، رادیوتراپی است. رادیوتراپی ناحیه سر و گردن خود می‌تواند با تأثیر بر مخاط‌ها عوارضی را ایجاد نماید. با توجه